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OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

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MEMORANDUM

SUBJECT: Updated Surface Water EECs for ODM Use on all Modeled Crops in the RED

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This memorandum provides updated EECs for all of the crops for which EECs were generated in the RED. These updated EECs are derived using the newer version of PRZM (PRZM 3.12) instead of the PRZM 2.3 version. EFED provided the older EECs in the same table for comparison purposes.

For Florida citrus, EFED corrected the application rate and reran the scenarios using the newer model to get updated EECs. The Florida citrus EECs were very different because an incorrect high application rate (1.88 lbs ai/A *2 applications) was used previously, compared to the proper application rate (0.375 lbs ai/A *2 applications). All other scenarios that were run with the newer model provided similar concentrations as compared to the older EECs. Also, the cabbage scenarios do not take into account the required irrigation, which would increase the EECs. Table 1 below lists the EECs.

Table 1. Updated Tier II upper tenth percentile EECs for ODM for simulated crops.

Crop	Maximum (μg ·L ⁻¹)	4 Day (μg ·L ⁻¹)	21 Day (μg·L ⁻¹)	60 Day (μg·L ⁻¹)	90 Day (μg·L ⁻¹)	Long-term Mean* (μg ·L ⁻¹)
Alfalfa for seed (Oregon, PRZM 3.12)	2.1	1.9	1.3	0.8	0.6	0.2
Alfalfa for seed (Oregon, PRZM 2.3)	2.9	2.6	1.7	1.0	0.7	0.2
Cabbage (Imperial Valley, CA, PRZM 3.12)	3.4	3.2	2.6	1.6	1.1	0.5
Cabbage (Imperial Valley, CA, PRZM 2.3)	4.2	4.0	3.1	2.5	2.1	0.6
Cabbage (Coastal Valley, CA, PRZM 3.12)	3.6	3.4	2.9	2.2	1.7	0.5
Cabbage (Coastal Valley, CA, PRZM 2.3)	4.0	3.7	2.9	2.3	1.7	0.4
Citrus (Florida, PRZM 3.12, 0.375 lbs ai/A *2 apps)	7.0	6.4	4.6	2.5	1.8	0.5
Citrus (Florida, PRZM 2.3, 1.88 lbs ai/A * 2 apps)	33.7	30.2	19.7	10.4	7.1	1.7
Cotton (Imperial Valley, CA, PRZM 3.12)	3.1	2.8	1.9	1.3	0.9	0.2

Cotton, (Imperial Valley, CA, PRZM 2.3)	3.2	2.8	2.1	1.6	1.1	0.3
Grain Sorghum (Kansas, PRZM 3.12)	10.9	9.7	6.8	3.7	2.7	0.7
Grain Sorghum (Kansas, PRZM 2.3)	10.5	9.1	5.9	3.1	2.1	0.5
Sweet Corn (Georgia, PRZM 3.12)	12.4	11.5	8.3	4.8	3.4	0.9
Sweet Corn (Georgia, PRZM 2.3)	11.8	10.4	7.0	3.8	2.6	0.6
Field Corn (Ohio, PRZM 3.12)	6.5	5.9	4.6	2.6	1.8	0.5
Field Corn (Iowa, PRZM 2.3)	6.1	5.4	3.7	2.0	1.4	0.4

st Upper 90% confidence bound on the 36 year mean with the variance calculated from the annual means.